ABSTRACT

A parts holding device that includes a holder with a row of spaced-apart

cavities, within which parts may be disposed. A bar containing a plurality of
spaced-apart permanent magnets is movably mounted to the holder and is
disposed parallel to the row of the cavities. The bar is movable in the direction of
the row of the cavities between first and second positions. When the bar is in the
first position, the magnets are aligned with the cavities and the magnetic

attraction forces generated by the magnets hold the parts in the cavities, and
when the bar is in the second position, the magnets are not aligned with the
cavities and the magnetic attraction forces generated by the magnets do not hold
the parts in the cavities. The parts holding device is connected to a movable
mounting structure for movement therewith. The bar is biased to the first position
and is moved to the second position by movement of the bar against a cam
surface.